

What is claimed is:

1. A method for treating an autoimmune disease in a subject which comprises administering to the subject an effective amount of (a) at least one interferon antagonist  
5 that reduces activity of a type I interferon, and (b) at least one Flt3 ligand (Flt3L) antagonist that reduces activity of a Flt3L to thereby treat the autoimmune disease.

2. The method of claim 1, wherein the autoimmune disease is selected from the group consisting of acquired immune deficiency syndrome (AIDS), ankylosing  
10 spondylitis, arthritis, aplastic anemia, Behcet's disease, diabetes, graft-versus-host disease, Graves' disease, hemolytic anemia, hypogammaglobulinemia, hyper IgE syndrome, idiopathic thrombocytopenia purpura (ITP), multiple sclerosis (MS), Myasthenia gravis, psoriasis, lupus and any combination thereof.

3. The method of claim 2, wherein the lupus is systemic lupus erythematosus (SLE) or drug-induced lupus.

15 4. The method of claim 2, wherein the diabetes is diabetes mellitus, Type I diabetes, Type II diabetes, juvenile on-set diabetes or any combination thereof.

5. The method of claim 2, wherein the arthritis is rheumatoid arthritis, juvenile rheumatoid arthritis, psoriatic arthritis or any combination thereof.

6. The method of claim 1, wherein the autoimmune disease is SLE.

20 7. The method of claim 1, wherein the subject is a mammal.

8. The method of claim 7, wherein the mammal is a human, a primate, a rat, a dog, a cat or a mouse.

9. The method of claim 1, wherein the interferon antagonist is selected from the group consisting of an antibody, an antigen-binding fragment of an antibody, a  
25 polypeptide, a peptidomimetic, a nucleic acid encoding a peptide, an organic molecule and any combination thereof.

10. The method of claim 1, wherein the interferon antagonist comprises soluble receptor for IFN- $\alpha$ .

11. The method of claim 1, wherein the interferon antagonist comprises a anti-IFN- $\alpha$  antibody or an antigen-binding fragment thereof.

12. The method of claim 1, wherein the Flt3L antagonist is selected from the group consisting of an antibody, an antigen-binding fragment of an antibody, a polypeptide, a peptidomimetic, a nucleic acid encoding a polypeptide, an organic molecule and any combination thereof.

13. The method of claim 1, wherein the Flt3L antagonist comprises a soluble Flt3 receptor.

14. The method of claim 1, wherein the Flt3L antagonist comprises a anti-Flt3L antibody or an antigen-binding fragment thereof.

15. The method of any one of claims 9, 11, 12 or 14, wherein the antibody comprises a monoclonal antibody, a chimeric antibody, an anti-idiotypic antibody, a humanized antibody, a primatized antibody and any combination thereof.

16. The method of claim 1, wherein the interferon antagonist and the Flt3L antagonist are part of one molecule.

17. The method of claim 1, wherein the effective amount of the interferon antagonist comprises from about 1 to about 10 fold molar excess of interferon.

18. The method of claim 1, wherein the effective amount of the Flt3L antagonist comprises from about 1 to about 10 molar excess of Flt3L.

19. The method of claim 1, wherein the administration of the composition is by intralesional, intraperitoneal, intramuscular or intravenous injection; infusion; liposome-mediated delivery; or topical, nasal, oral, ocular or otic delivery.

20. The method of claim 1, wherein the type I interferon is an interferon- $\alpha$  (IFN- $\alpha$ ) or an IFN- $\beta$ .

21. The method of claim 1, wherein the interferon antagonist reduces binding of a type I interferon with its receptor.

22. The method of claim 1, wherein the interferon antagonist reduces interferon-dependent signal transduction.

23. The method of claim 1, wherein the interferon antagonist reduces interferon serum levels.

24. The method of claim 1, wherein the interferon antagonist reduces interferon secretion from cells as measured by an interferon receptor binding assay.

5 25. The method of claim 1, wherein the interferon antagonist reduces bioavailability of interferon in serum as measured by an interferon receptor binding assay.

26. The method of claim 1, wherein the interferon antagonist reduces development of cells which produce type I interferon in the subject as measured by a monocyte differentiation assay.

10 27. The method of claim 1 or 11, wherein the interferon antagonist is TNF.

28. A therapeutic composition to inhibit monocyte differentiation into dendritic cells capable of antigen presentation which comprises:

(a) at least one interferon antagonist that reduces activity of a type I interferon, and

15 (b) at least one Flt3 ligand (Flt3L) antagonist that reduces activity of Flt3L.

29. The composition of claim 28, wherein the type I interferon is an interferon- $\alpha$  (IFN- $\alpha$ ) or an IFN- $\beta$ .

30. The composition of claim 28, wherein the composition further comprises a carrier.

20 31. The composition of claim 28, wherein the interferon antagonist is selected from the group consisting of an antibody, an antigen-binding fragment of an antibody, a polypeptide, a peptidomimetic, a nucleic acid encoding a polypeptide, an organic molecule and any combination thereof.

32. The composition of claim 28, wherein the interferon antagonist comprises a soluble receptor for IFN- $\alpha$ .

33. The composition of claim 28, wherein the interferon antagonist comprises an anti-IFN- $\alpha$  antibody or an antigen-binding fragment thereof.

34. The composition of claim 28, wherein the interferon antagonist is TNF.

35. The composition of claim 28, wherein the Flt3L antagonist is selected from the group consisting of an antibody, an antigen-binding fragment of an antibody, a peptide, a peptidomimetic, a nucleic acid encoding a peptide, an organic molecule and any combination thereof.

5 36. The composition of claim 28, wherein the Flt3L antagonist comprises a soluble Flt3 receptor.

37. The composition of claim 28, wherein the Flt3L antagonist comprises an anti-Flt3L antibody or an antigen-binding fragment thereof.

10 38. The composition of any one of claims 31, 33, 35 and 37, wherein the antibody is a monoclonal antibody, a chimeric antibody, an anti-idiotypic antibody, a humanized antibody, or a primatized antibody.

39. The composition of claim 28, wherein the interferon antagonist and the Flt3L antagonist are part of one molecule.

15 40. The composition of claim 28, wherein the composition comprises two or more interferon antagonists and a Flt3L antagonist.

41. The composition of claim 40, wherein one interferon antagonist is TNF.

42. The composition of claim 40, wherein the composition comprises an anti-IFN- $\alpha$  antibody, an anti-Flt3L antibody and TNF.

20 43. An *in vitro* assay for determining a subject's risk for developing an autoimmune disease which comprises:

(a) obtaining a serum sample from the subject;

(b) quantifying IFN- $\alpha$  and Flt3 ligand (Flt3L) in the serum sample; and

25 (c) comparing the quantity of IFN- $\alpha$  and Flt3L with the quantities of IFN- $\alpha$  and Flt3L in serum from subjects with an autoimmune disease, thereby determining the subject's risk for developing an autoimmune disease.

44. The method of claim 43, wherein a risk of developing an autoimmune disease occurs when the quantities of IFN- $\alpha$  and Flt3L are within about a 30% range of those quantities for subjects with an autoimmune disease.

45. The method of claim 44, wherein said risk increases when said range is about 20%.

46. The method of claim 43, wherein said comparison is made for age-matched subjects.

5 47. A kit for determining a subject's risk for developing an autoimmune disease or for monitoring the status of an autoimmune disease in a subject which comprises a composition which specifically binds to Flt3L and to IFN- $\alpha$  in an amount effective to detect Flt3L and IFN- $\alpha$  in a biological sample of a subject.

10 48. The kit of claim 47, wherein the biological sample is a blood sample or a serum sample.

49. The kit of claim 47, wherein the composition comprises a monoclonal antibody that binds Flt3L and a monoclonal antibody that binds IFN- $\alpha$ .

50. The kit of claim 47, wherein the kit further comprises one or more reagents for detecting amounts of the composition bound to one or more samples.

15 51. The kit of claim 47, wherein the composition is labeled with a detectable marker.

52. The kit of claim 51, wherein the detectable marker is selected from the group consisting of a fluorescent marker, a radioactive marker, an enzymatic marker, a colorimetric marker, a chemiluminescent marker and any combination thereof.

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